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ABSTRACT OF THE DISCLOSURE

One or more embodiments of the invention provide a data structure, method, apparatus, and article of manufacture for representing data in a self-expanding data package. The package comprises one or more basic table data having zero, one or more table rows, a set of one or more constant lists having one or more values, and one or more row validation calculations. Use of the set of constant lists and row validation calculations provides a mechanism for compact data storage, wherein the self-expanding data package may be expanded. To expand the package, each list member of a constant list is combined with all other basic table rows and additional list members to produce every possible combination of table rows. Row validation calculations are applied to test validity of each row, and only those expanded table rows that are valid appear in the expanded table.

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